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TECHNICAL SERIES No. 17.

U. S. DEPARTMENT OF AGRICULTURE,

BUREAU OF ENTOMOLOGY.

L. O. HOWARD, Entomologist and Chief of Bureau.

CONTRIBUTIONS TOWARD A MONOGRAPH OF THE SCOLYTID BEETLES.

CONTENTS AND INDEX.

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L O. HOWARD, Entomologist and Chief of Bureau.

CONTRIBUTIONS TOWARD A MONOGRAPH OF THE SCOLYTID BEETLES.

I. THE GENUS DENDROCTONUS.

By A. D. HOPKINS, Forest Entomologist.

II. PRELIMINARY CLASSIFICATION OF THE SUPERFAMILY SCOLYTOIDEA.

By A. D. HOPKINS, Forest Entomologist.



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ERRATA.

Page x, line 23, for Zimmerman read Zimmermann.

Page 1, first paragraph, second line, for 91 read 1902.

Page 3, line 12, for junipiri read juniperi; line 14, for Zimmerman read Zimmermann.

Page 40, legend to figure 26, for *left* read *right*, throughout; legend to figure 26, line 6, for *sinistral* read *dextral*, for *dextral* read *sinistral*.

Page 41, legend to figure 27, line 1, for left read right.

Page 42, legend to figure 28, line 1, for left read right.

Page 43, legend to figure 43, line 1, for left read right.

Page 59, legend to figure 40, line 4, for gular read entogular; line 5, for gular read genal, in both places.

Page 60, legend to figure 41, line 4, for labial read labral.

Page 61, line 18, after areas insert (fig. 40, m).

Page 69, line 30, for distinctly read strongly.

Page 80, line 43, for Zimmerman read Zimmermann.

Page 90, line 15, for Zimmerman read Zimmermann.

Page 95, line 7, for Zimmerman read Zimmermann, after type omit comma; line 35, for Zimmerman read Zimmermann.

Page 98, line 38, for lejophilla read lejophylla.

Page 101, line 3, for lejophilla read lejophylla.

Page 124, line 21, for 2289 read 2298.

Page 146, line 18, for Quairière read Quairière.

Page 148, line 19-20, for Zimmerman read Zimmermann.

Page 150, line 13, for Zimmerman read Zimmermann.

Page 154, line 11, for Cabon read Cobon.

Page 156, line 30, for Zimmerman read Zimmermann.

Page 157, line 1, for Zimmerman read Zimmermann.

Page 160, line 19, for XV read II; line 20, for Zimmerman read Zimmermann; line 21, for XV read II, for 150 read 149.

Page 164, line 28, for 1906b read 1905.

Page 179, line 8, for X read IX.

ΧI



LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ENTOMOLOGY,
Washington, D. C., March 16, 1909.

SIR: I have the honor to transmit herewith manuscript of the first part of a bulletin of the technical series to be entitled "Contributions toward a Monograph of the Scolytid Beetles." This family of beetles includes some of the most important enemies of North American forests, as well as of crude forest products, and therefore must demand special attention in future systematic and economic investigations by this bureau and by forest entomologists connected with other public institutions and private enterprises. It is necessary. as a foundation for such work, that the heretofore described species should be accurately identified, that those new to science should be described, and that this information, together with other systematic data based on original research by this bureau, should be made available in the form of contributions to a monograph. This work has been undertaken by Dr. Hopkins, of this bureau, and the greater part of the collecting and working up of the material has been completed. Delay in publication will be avoided, and it is believed that the published results will be more useful in future systematic and economic investigation if the results relating to groups of species which have similar characters and characteristics and similar relations to given economic problems are published as parts of a bulletin rather than in one undivided publication. These technical parts are to be supplemented in a like manner by parts of a bulletin of the regular series, giving information of immediate practical importance to the forester and owners and managers of private forests.

The first part of this bulletin is entitled "The Genus Dendroctonus." It embodies the results of extensive systematic investigations of the genus, carried on by Dr. Hopkins during the past 17 years, and is of especial interest and importance from the fact that it deals with a small group of beetles which are the most destructive enemies of the principal coniferous forest trees of North America. •

The discussions and illustrations relating to anatomical and technical details are necessary as a basis for the correct description, interpretation, and recognition of generic and specific characters, on which depends the future success of economic work on the scolytid beetles,

and as aids in the preparation of technical and economic contribu-

tions to the monograph.

I recommend the publication of this paper as Part I of Technical Series, No. 17, of the Bureau of Entomology.

Respectfully,

L. O. HOWARD,

Chief of Bureau.

Hon. James Wilson, Secretary of Agriculture.

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